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DESIGN

A monthly journal for manufacturers and designers

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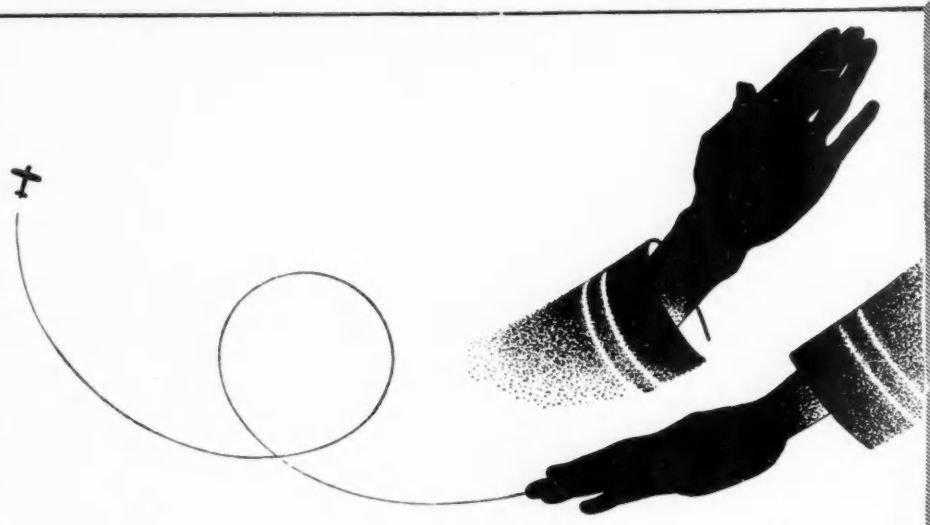
Furniture design and development

COUNCIL OF INDUSTRIAL DESIGN

NUMBER 15 : MARCH 1950

PRINTED AND PUBLISHED IN GREAT BRITAIN

PRICE TWO SHILLINGS



DO PILOTS TALK T.I.?

Those swooping palms, those turning wrists, more eloquent than words when flying men foregather . . . do *they* refer to TI? Rarely, if you put it like that. But when you consider that there is not a British plane in service which cannot refer to TI engineering for *something* valuable or vital . . . from precision tubes in engine and frame to aluminium skin, from oxygen bottles, components of oil-cooler or retractable undercarriage to pilot's seat or radio parts . . . who then can doubt that pilots talk TI?

The letters TI mean Tube Investments Limited, of The Adelphi, London, W.C. (Temple Bar 0271). They also stand for the thirty producing companies of the co-ordinated TI group, makers of precision tubes, of bicycles and components, of wrought aluminium alloys, electrical appliances, pressure vessels, paints, road signs, metal furniture . . . and essential mechanical parts for a thousand and one things which everybody uses.

THE SURNAME OF A THOUSAND THINGS

DESIGN

A monthly journal for manufacturers and designers

ISSUED BY THE COUNCIL OF INDUSTRIAL DESIGN AND THE SCOTTISH COMMITTEE OF THE COUNCIL

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"ART" AND THE ENGINEER

"SOME SECTIONS, and especially that of machinery, feeling their pre-eminence to be secure and undoubted, were content to be plain and unpretending, in consequence of which they developed a high degree of artistic excellence."

Thus in 1851 a critic, writing of the Great Exhibition, anticipated the arguments and catch-phrases of succeeding generations of design reformers. But almost a hundred years were to pass before his estimate of excellence was again to become the common currency of commercial practice. It would be hard today to better his appraisal of the virtues of sane engineering design: "The only beauty attempted was that which the stringent application of mechanical science to the material world could supply; and in the truthfulness, perseverance and severity with which that idea was carried out, there was developed a style of art at once national and grand." This beauty through utility is indeed witnessed by the illustrations of machinery of that day. Naïve and primitive as these engines may appear now, they share that honesty of design which distinguishes the best of our present-day machines and scientific instruments.

Somewhere in the intervening decades there must have occurred in the engineering mind a sad confusion between "art" and design, for it is only within the present generation that engineers have again achieved a high degree of aesthetic excellence through that "strict attention to the proprieties and requirements of each machine" which was demanded by the same Victorian critic.

We are not out of the wood yet, to judge by the published brochures of some of our venerable companies with high reputations for engineering quality. Cast iron cabriole legs, supporting modern mills or mixers, still appear in engineering catalogues to remind us that machinery was once regarded as the furniture of the factory. Stylistic doodles still disfigure otherwise sensible housings, and nameplates still suffer from too much loving care. Yet the paradox in this situation is that the makers of such pieces probably belong to the school which says that the employment of artists may be fine and dandy for textiles or pottery, but leave machinery to the engineer. The fear that an artist or designer will only add unnecessary decoration to an otherwise efficient machine dies very hard, though experience suggests that a works engineer is much more likely to fall for filigree than is a trained designer—and if he does not he may well go to the other extreme and produce something looking like overgrown Meccano.

This is not to argue inevitable conflict between the engineer and the designer; indeed the ideal would be that they should be one and the same, that the engineer should be artist enough or the industrial designer engineer enough to ensure that a machine looks as well as it works and *vice versa*.

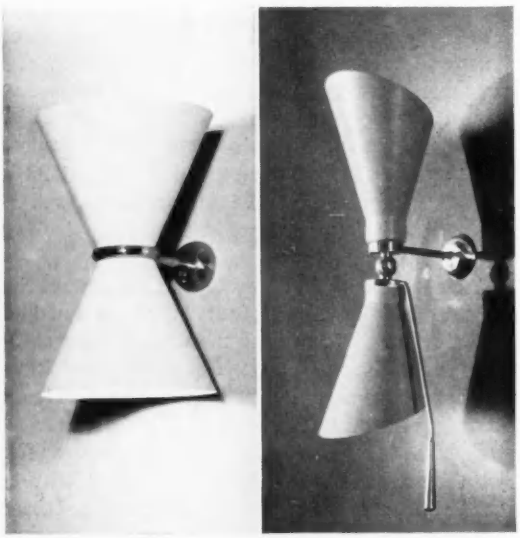
But whether the one or the other or both are on the job the product can be a good looker, and hence a good seller, only if its appearance is considered from the outset. Human good looks depend on bone structure, not on cosmetics. It is the same with machines. The designer or "stylist" called in at the end can do no more than mask the wrinkles. P. R.

LIGHT FITTINGS FROM POST-WAR EUROPE

"The emphasis was quite properly on domestic lighting" in an exhibition arranged by the Scottish Committee of the Council of Industrial Design, reviewed here by Paul Reilly

IT MUST BE many years since the words "ravishingly pretty" have been applied to an exhibition of contemporary design—but that epithet was overheard at the opening of the Exhibition of European Light Fittings staged last month by the Scottish Committee of the Council of Industrial Design in the Glasgow store of Wylie and Lochhead Ltd.

The first view of this display, entered as it was through the sombre, conventional halls of a respectable Scottish furnishing emporium, was indeed surprising and ravishing, for the light fittings which we had come to see seemed to play second fiddle to an entrancing array of contemporary textiles, furniture, pottery, wallpapers and climbing botanical vegetation. The individual lights were distributed throughout a series of rooms without walls—for such was the artifice of the two young designers responsible (the brothers Robert and Roger Nicholson) that the exhibition could be enjoyed as a cheerful, colourful whole or in detail as bays and corners of many imaginary rooms. A few props—a modern armchair, a coffee table, a sophisticated utility chest, a dining table laid for four, a vegetable rack or a telephone on a shelf—would conjure from nowhere an impression of living rooms, bedrooms, kitchens and halls of comfortably furnished homes. In each context the appropriate lights, identified by bold and legible index numbers, reminded the visitor that this was indeed that rare thing—an exhibition of well designed domestic light fittings.



Italian wall fittings for hall or corridor lighting. Left, two fixed white enamelled cones. Right, blue enamelled cones, the upper light fixed, the lower adjustable by brass handle and universal joint. Arteluce, Milan

The emphasis throughout the exhibition was quite properly on domestic lighting, for of all the equipment of the home the electric lighting has been most in need of design therapy. There has seemed, in this industry, to be no half-way house between the functional or clinical and the lush suburban, between the frosted football and the scalloped bowl, between the bathroom wall strip and the parchment-shaded electric candle, or between the office desk light and the overhatted vase.

Attempts have been made in recent months to resurrect Adam or Regency forms, but such conversions or imitations ignore the essential difference between the flickering candlewick and the unblinking stare of an electric filament. They underline, too, the sad poverty of design inventiveness which has from the beginning dogged the brilliant invention of electricity itself. The new form of lighting was handicapped at birth, for it came at a time of architectural plagiarism and design debility, when the line of least resistance was to endow the new source of

continued on p. 5



Three Italian standard lamps designed by Gino Sarfatti for Arteluce, Milan. Left: Brass standard adjustable by pivot and counterpoise, with movable perforated enamelled shade. Centre: Brass standard, partly leather covered, with 4-foot diameter matted spun glass shade. Right: Brass standard, flexed near its base, with enamelled shade adjustable by brass hand-lever

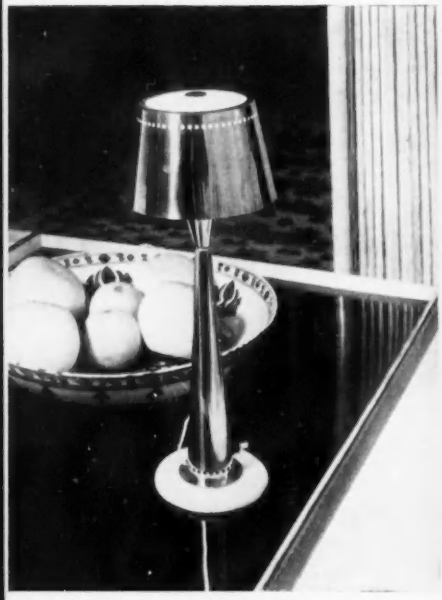


Two more conventional standards: left, a brass shaft with pivoted fabric shade from Sweden; right, from Italy a mahogany shaft with brass feet. The Swedish standard is made by Nordiska Kompaniet, Stockholm; the Italian is designed by Gino Sarfatti and made by Arteluce, Milan





Contrasting novelties from Italy: left, a table standard with enamelled base, brass shaft and 3-foot diameter shade; right, compact brass table lamp, with twin swivel shades. Both designed by Gino Sarfatti for Arteluce, Milan







Left: A variation on the brass cone theme, also by Gino Sarfatti for Arteluce, Milan. Centre: Swedish gourd-shaped ceramic base with the well-known Klint white paper pleated shade (Nordiska Kompaniet, Stockholm). Right: Bentwood table standard from Denmark with Swedish fabric shade, closed at the top (Illums Bolighus, Copenhagen)

continued

light with the familiar trappings of the wax candle, the oil lamp or the gas mantle.

Between the two wars there was a determined effort to give more logical shapes to lamps and light fittings; the results, though admirable for kitchens and bathrooms, offices and hospitals, seldom exhaled that charm and grace which could make them acceptable for any but the most austere and self-consciously modern living rooms. But contemporary taste today, as revealed by these Scandinavian and Italian exhibits, demands something more gracious and more elegant, yet without pretence or compromise with the past.

There is, of course, a noticeable difference of approach between the two groups. As Professor Gordon Brown said in his opening address, the

continued overleaf



An unobtrusive aluminium fitting made by Merchant Adventurers of London Ltd, for office use



General view of one of the many bays in the exhibition, showing a bold use of colour whether as paint, wallpaper or textile hangings, together with examples of contemporary furniture and wall fittings, and both old and new pottery and glass. Designers: Roger Nicholson, ARCA, *and Robert Nicholson,* MSIA

continued

Scandinavian is the "anonymous approach," the sort of quiet bridge-building between past and present styles which, in furniture, can be achieved through the study of the Windsor chair, whereas the Italian is the "genius approach" which produces individual and original designs, more exciting in themselves, but also more exacting in their placing and setting.

The student will also observe that the Italians favour metal fittings—bright brasses or light enamel finishes—with perforations to lighten a solid shade. The Scandinavians, though experimenting with brass and enamels, are more at ease with ceramic bases and fabric or paper shades. The few British pieces in the collection suggested that our designers have not yet found an independent style or medium, though the setting of the exhibition confirmed the view that in display technique this country is well in the vanguard.





Dressing-table mirror with parchment shaded lights (Italian). Tubular brass table lamp with frosted glass panel inset in white enamelled shade (Poulsen, Copenhagen)



This view shows the open planning of the exhibition, with lightweight display fittings, as on the right, dividing one bay or "room" from the next. The furniture was mostly lent from stock by Scottish stores or manufacturers. Colour photographs for DESIGN *by Studio Swain of Glasgow*

NEW FURNITURE FROM TWO EXHIBITIONS

TRADE EXHIBITIONS are seldom displays of good design, and the British Furniture Trades' Exhibition, in its mixture of good, bad and indifferent, was no exception. It would be idle to pretend that the makers of well-designed furniture, as DESIGN and its readers understand the term, made up a large percentage of the exhibitors; but they were there, to be found if you looked for them. And from conversation with several, in the closing days of the show, we gathered that trade buyers had looked for them and found them.

Mostly, the well-designed furniture was made by small or medium-sized firms; in this industry, the awakening of the big mass-producers to contemporary design has yet to come.

Inevitably—in such a large non-selective exhibition as this—there were many exhibits whose highest merit was inoffensiveness of design. There were others which could not claim that merit. Very little modernistic design was to be seen—even the Borax firms, it appears, have grown tired of the lightning-flash *motif* and the cult of angles for angles' sake; but there was far too much tortured timber in period styles. Almost invariably the manufacturers of period furniture choose to copy the more pretentious styles. One exhibitor showed chairs and tables in the simple Colonial style of early America, but with this exception they all appeared to have chosen Jacobethan.

Exhibits of the work of tomorrow's designers—students in six art schools and a trade Technical College—held out some hope for the future, but it was noticeable that the trade College exhibits, alone in this section, were unoriginal in style though no doubt excellent in craftmanship.

This exhibition was for the trade only: the public's turn comes with the *Daily Mail* Ideal Home Exhibition (7 March to 1 April, Olympia, London)—at the time of writing, a future event. Its promised attractions include a Heal's stand for the first time since the war, and a private-enterprise house furnished by the Council of Industrial Design. We hope to illustrate some of its rooms next month.

Wool-covered armchairs and three-seat settee designed by Howard Keith and made exclusively for Heal's—an Ideal Home exhibit (right)



Dressing-table and stool in Australian walnut and white sycamore—recent additions to the growing Cumbrae range, shown by H. Morris & Co Ltd at the Furniture Trades' Exhibition



Utility dining-room suite in bleached mahogany designed by Christopher Heal; shown by Heal & Son Ltd at the Ideal Home Exhibition



LIGHT, SPACE — AND POTTERY

In a showroom  in Copenhagen

SIDE BY SIDE in the same square in Copenhagen stand the showrooms of two well-known Danish potteries—Bing and Grøndahl, and Royal Copenhagen. Behind an unchanged façade, the interior of the Bing and Grøndahl premises has been completely redesigned since the war—and redesigned so successfully that the designer, Architect Finn Juhl, was awarded the Eckersberg Medal of the Danish Royal Academy for it. This award has not previously been given for interior design.

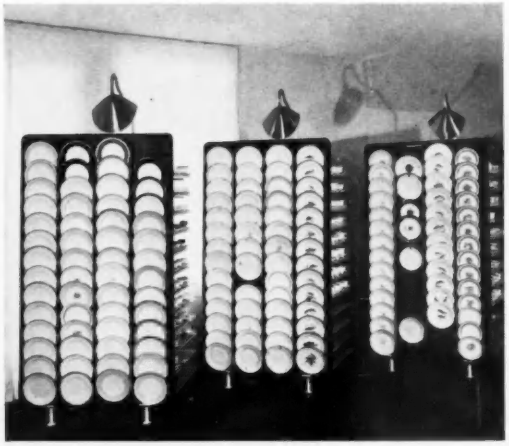
Most of the ware that Bing and Grøndahl display is intended for foreign visitors, and much of it is in traditional style (the tableware illustrated above is an exception). The designer of the showrooms has not looked backward, however; by brilliant use of colours and modern lighting methods he has given an air of brightness and spaciousness to the L-shaped ground-floor and first-floor premises.

The ground floor is divided into three sections: a waiting room, with small tables and chairs, on a slightly higher level, at one side; the showroom proper; and behind it the sales section, with counters, shelves and storage space.

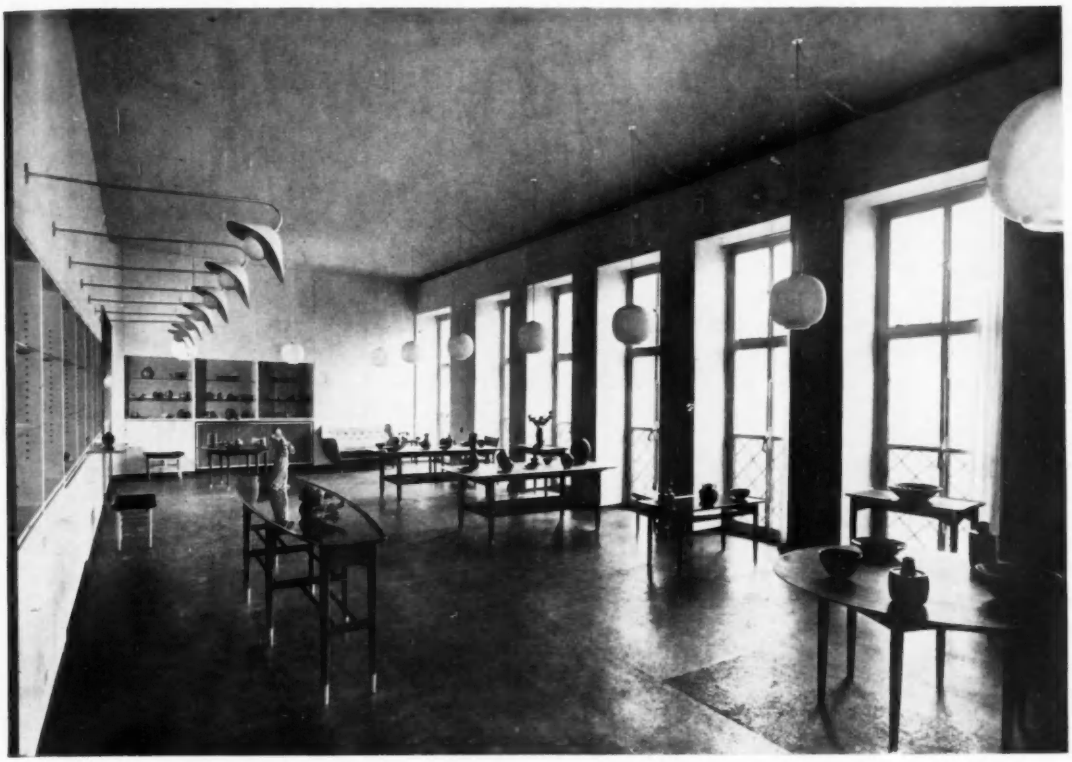
The main room on the first floor faces the street



The entrance to the sales section (at rear of the ground-floor showroom) is emphasised by Oregon pine panelling of walls and ceiling. Elsewhere on this floor the walls are painted yellow and the ceiling green



Plates are shown in vertical racks on these display units, with matching cups, saucers and other items en suite *on shelves behind them: the maximum of goods in the minimum of space, without overcrowding or confusion*



and is used for exhibitions. Recessed showcases are the only fixtures here; they run the whole length of the back wall and half the length of one end. Additional display space on both floors is provided by 37 tables of various shapes, sizes and colours.

The main light fittings on the first floor can be moved to give a concentration of light where it is desired. Each lamp is suspended from a flex which passes through a loop, and this loop can be clamped into one of several holes which are spaced at intervals across the ceiling. Throughout the showrooms the design of light fittings has received special attention; those for the showcases have white glass globes with shaped metal reflectors painted white on the inside.

And to the obvious question, *Has all this trouble been worth while?* the answer is given by the manager of the showrooms. "Since they were redesigned, more customers have come in and the volume of business has increased." P. H.



Display tables, right, provide an extremely flexible setting for the display of individual pieces or groups of pottery; they are small enough to be used in windows as well as showrooms. Larger examples of the series are seen, above, in the first-floor showroom

DESIGN POLICY IN ACTION

"INDUSTRIES . . . PRODUCING EVERYTHING appertaining to the equipment of a house (furniture, textiles, carpets, china, etc) should be careful not to move in different directions. They should endeavour rather to co-ordinate their new colours and design with each other and also with the general trend of style in architecture. This is the only way in which to create a contemporary style instead of odd fashions."

That paragraph may read like a piece of Council of Industrial Design propaganda, but in fact it is quoted from a publicity booklet published by Vantona Textiles Ltd. The statement sums up the far-sighted attitude towards design which underlies all the firm's activities. Vantona believe that a product should be well made and well designed and, moreover, that it should be well presented—in packaging, display, press advertising and publications. Roland Dunkerley, chairman and managing director, and Dennis Hayes, publicity manager, see that this is done.

Vantona products range from bedcovers and blankets to towels and ticking. Responsibility for textile design belongs to the firm's cloth construction department, under J. Lever, working in collaboration with their consultant architect-designer, Michael Rachlis, M INST RA. Each design is discussed at every stage and the staff designers keep abreast of design developments in complementary fields by visits to the London showrooms of the consultant, where their products are shown in a contemporary setting.

Patterns are not just drawn on paper; the design of each product is influenced by the method of weaving used, and every member of the design staff must be a qualified technician. Seventy-five per cent of the Vantona bedcovers alone are redesigned each year; not because the previous year's designs are out of date but because the firm feel that if they are to remain leaders in the quality market they must always be ahead of the average buyer's taste.

In keeping with the high standard of product design is the quality, both in appearance and contents, of Vantona publications. The approach to wholesaler, retailer and consumer is educational; the style is different for each, but consistently neat and lucid.

In textiles, the part that colour plays in design is very important. Realising its effect on saleability, Vantona use full-colour illustrations in booklets and press advertising wherever practicable.

* This is the second article in an occasional series dealing with firms whose consistent design policy is evident both in the design of products and in their presentation

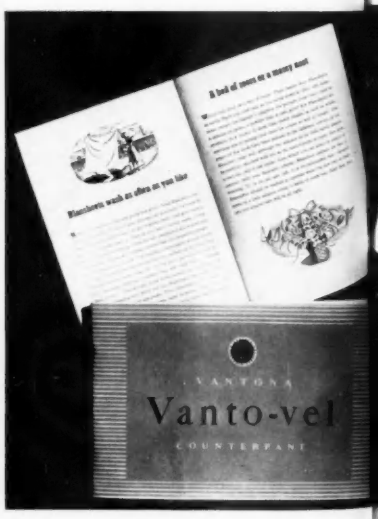
1 : HOUSE-MARK



2 : PRESS ADVERTISING



3 : PRINTED MATTER



Packaging is regarded by the management as an essential part of production, and every opportunity is taken to bring this home to the workpeople. At a recent internal exhibition designed to show the workers how the jobs of each section contribute to the total of the company's achievements, a display of packaged and unpackaged merchandise side by side was accompanied by a card which read: "These examples of made-up products demonstrate the importance of good presentation."

A high standard of packaging has characterised Vantona products for the last decade and a half, ever since the firm pioneered, in this country, the individual packaging of towels and blankets for sales-appeal as well as protection. Denis Wilson, the designer, has attempted to reflect the character of each article in its package; no easy task since the printed design is limited to a paper band, the rest of the wrapper being transparent Cellophane, to reveal the contents.

1 Pennants in green and white are flown from Vantona's several Lancashire mills. They incorporate the firm's symbol, designed by Denis Wilson of Manchester and based on the interweaving of warp and weft.

2 For advertisements in the home press, Osborne Peacock are the agents. Overseas advertising (by Lintas) is primarily in the Commonwealth; it is more lavish in character, as illustrated here.

3 Two examples from the wide range of Vantona booklets. Above, informative advertising directed to the consumer; below, a sample book for the trade.



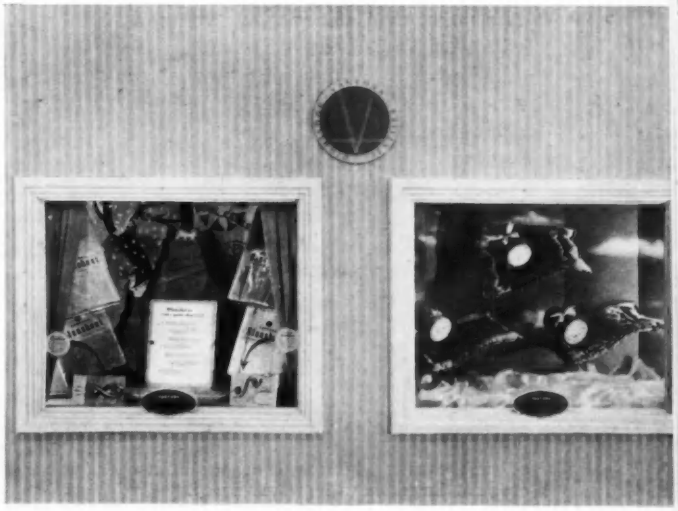
4 Silk-screened cover of sample book; printed ticket; woven label. All are for the *Court* bedcover and all use the same style of lettering, which is also seen in the *Court* pack, above, top right.

5 Display windows for Blansheets and down quilts were built into the end wall of Vantona's 1949 BIF stand, designed by J. E. Slater of Leicester. S.K.L.

4: SAMPLES, LABELS



5: DISPLAY



INSTRUMENTS FROM THE 1951 STOCK LIST

Rationalisation, in war and post-war years, has led to widespread redesign

FOR MANY YEARS before the war, British scientific instruments were largely made as "one-offs." This implied a considerable use of built-up construction, mainly from simple castings, rods, sheets and tubes, and gave great flexibility of design. Consequently many customers were able to have their own small modifications incorporated in their orders, and the laboratory furnishers vied with each other to list the largest number of varieties.

In the last few years, as a result of manufacturing pressure during the war and increased labour costs, a process of stern rationalisation has been found essential. The number of types has been reduced to the minimum, to allow efficient production in batches, and this revolution has meant the redesign of practically all the standard types of instrument. Now that manufacture in quantity is often found possible, the use of die-castings and mouldings is frequently economically justified, and the influence of the smooth forms and easy curves characteristic of these methods of manufacture has played its part in changing traditional appearances.

Occasionally the tendency for designing to be done by a works draughtsman without user-experience results in a product planned for economical manufacture rather than efficiency and convenience in use, whereas the reverse should be the logical procedure. All the Stock List examples shown here, however, have been chosen as illustrating the best possible compromise between the viewpoints of manufacturer and user.

Surgical instruments and equipment, of which two examples are included, have always been made with only one object in view—perfect efficiency in use. The liaison between manufacturer and highly intelligent user is probably closer than in any other industry, and this has resulted in the uniformly excellent standard of design in this field.

1: This cylinder liner checking machine is a good example of Sigma automatic inspection equipment. The heart of the machine is the patent electric signal gauge unit. Nine of these units can be seen, each capable of checking one essential dimension with great accuracy.

In use, the cylinder liners are placed on a locating jig on the projecting front of the base. When the operator presses the foot pedal, the component is automatically drawn into the machine and gauged. If all dimensions are correct a green signal light appears at the bottom of the indicator panel; for incorrect dimensions a red light appears if undersize, and a yellow one if too large.

Features are the convenient operating position; the manner in which the sensitive measuring elements are protected from dirt, knocks or alteration of adjustments by enclosure in a Perspex-fronted compartment; graphic arrangement of the indicator panel, in which leading lines indicate the dimension associated with each warning lamp.

2: When electrodes are placed on the human scalp, minute voltages can be picked up which, when amplified and recorded, can give valuable evidence of brain disorders. The recording instrument used for this purpose, the electroencephalograph, is now a recognised part of the equipment of many hospitals, and the Ediswan equipment illustrated here is an excellent example of the best modern practice. Provision is made for wave-forms to be recorded from six electrodes simultaneously, and the whole assembly is in the form of a low console, at which the operator can sit with all controls within easy reach, and with the recordings and the patient under observation.

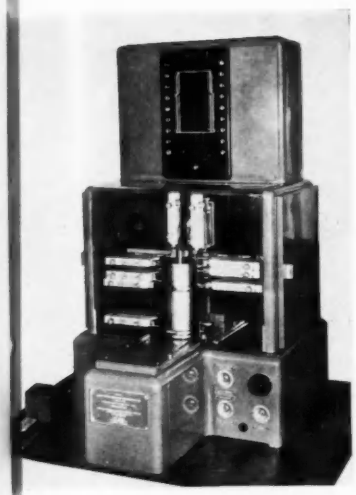
Control has been greatly simplified by grouping the six channels into panels, with white lines enclosing each independent section. The instrument has a handsome finish of cream enamel, black ebonite and chromium, maintaining the customarily high standard of British medical equipment.

3: In the *Centanaest* anaesthetic apparatus, every detail has been designed for efficiency in use. Cylinders of four different gases are carried in the side recesses. The four gas-control panels in the front are arranged in two groups spaced apart to avoid the possibility of confusion—anaesthetic gases on right and respiratory stimulants on left. Each panel is a different colour to conform with BSI recommendations, and identifying tabs below each of the four Rotameter flowmeters in the centre are coloured to match.

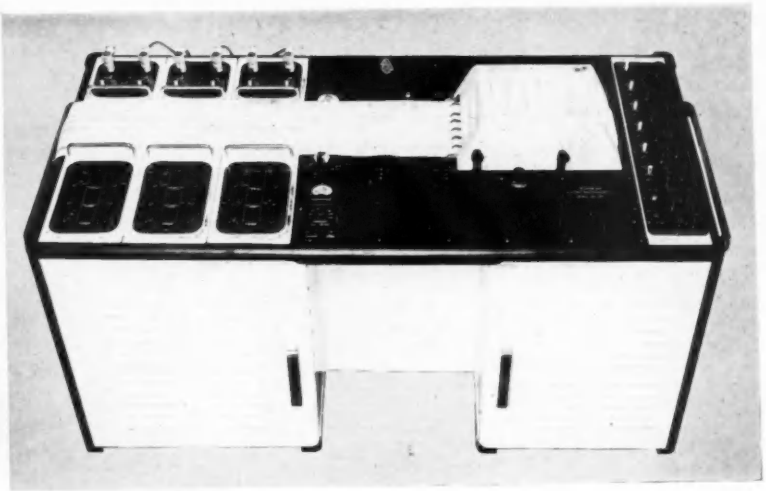
The top of the pressed steel body acts as a well for instruments; it is rubber-lined for silence and has a railing round to prevent bottles falling off. The top is detachable by undoing four screws, giving easy access to the automatic gas-pressure regulators beneath, and to backs of control panels.

The finish is cream enamel with chromium-plated fittings.

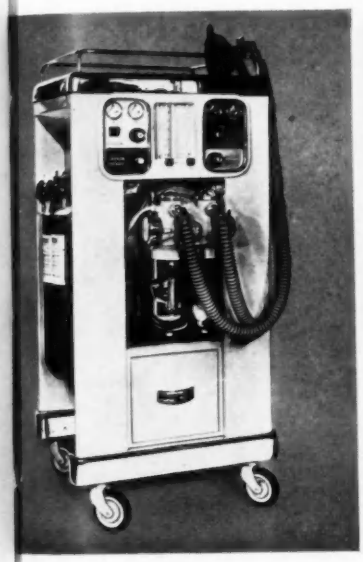
4: The attractive appearance of this heavy element tube furnace has evolved logically from the internal layout, itself determined by operating needs. The essential requirement is the central combustion tube which can be heated to temperatures up to 1150° C. For long life, a heating element of heavy gauge is employed, requiring in consequence a relatively large current at low voltage. This involves the use of a "step-down" transformer for which space has to be



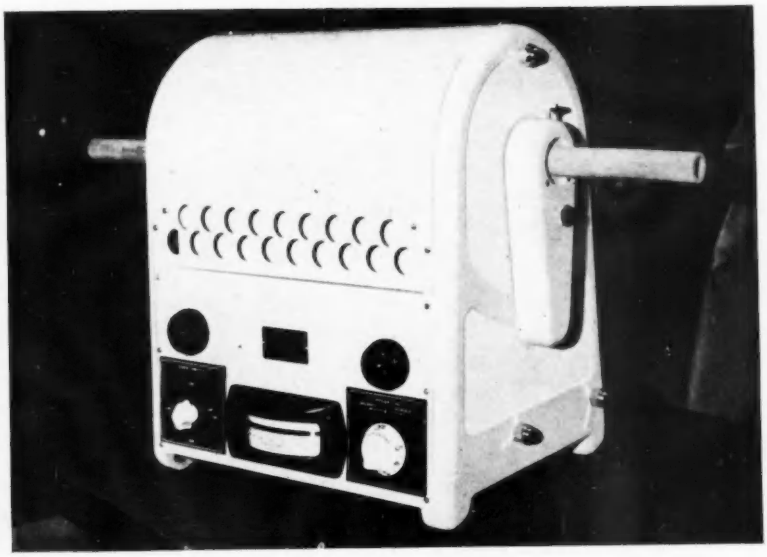
1: *Inspection machine by Sigma Instrument Co Ltd*



2: *Electro-encephalograph by Ediswan Electric Co Ltd*



3: *Anaesthetic apparatus by A. Charles King Ltd*



4: *Tube furnace by Griffin & Tatlock Ltd*

found within the casing. The combustion tube has been placed at the top to be at a convenient height for connecting to associated apparatus, and below it, where cool air can circulate, are the transformer, switch, Simmerstat regulator, warning lights and pyrometer for indicating temperature. The casing is of sheet aluminium, held between two cast light-alloy end plates. The elongated unit, on right, contains the electrical connections to the heating element, so that the latter can easily be withdrawn when required.

5: Unicam electric recording drum, used in medicine and biology to record tracings from various types of remote-controlled writing devices on specially prepared paper round the drum. The writing devices can be mounted in any vertical or radial position on the upright members attached to the flanged top of the body. The drum rotates at a constant pre-arranged speed, selected by the control knob at the front. Gearing gives a choice of 12 speeds.

continued overleaf

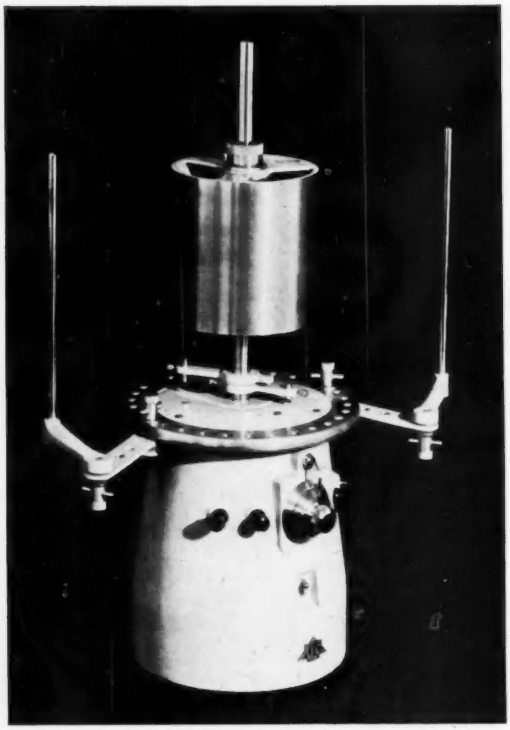
Design features include the single knurled clamp for the drum, the space available for fitting larger drums when required, the total enclosure of the drive in the light-alloy body, the recessed on-off switch, and the smooth clean finish appropriate to biological work.

6: This laboratory valve voltmeter is interesting both electrically and constructionally. In addition to a very interesting technical specification, the instrument is, constructionally, well laid out and can be made equally well in large or small batches. The case is of polished walnut with sides shaped for lightness, strength and ease of lifting. The meter has a plain black surrounding panel to assist concentration on the scale. The hinged flap at the front contains the removable radio-frequency probe, and the louvred end, separated for heat insulation from the main body of the instrument, contains power pack and valves.

7: The design of hearing aids is interesting since they may be classed as engineering products *and* dress accessories. This double affinity is reflected in the Amplivox instrument, in which a wholly practical technical layout has been given pleasing form by the industrial designers, Scott-Ashford Associates.

The die-cast light alloy case is made in three parts to facilitate assembly and allow easy access to the batteries. It is remarkably small, considering that it houses a three-valve amplifier, batteries and microphone, and measures only $5 \times 2\frac{5}{16} \times \frac{3}{4}$in. A moulded plastic control panel at the top carries the on-off switch, high-low tone control and volume control. A miniature plug for the earpiece-lead is seen on the right.

The plastic medallion in the centre fulfils a useful as well as a decorative purpose. It covers the microphone aperture, and is sunk into the case so that noise is not caused by clothes rubbing against it.



5: *Electric recording drum by Unicam Instruments (Cambridge) Ltd*



6: *Laboratory valve voltmeter by Electronic Instruments Ltd*

8: Absorptiometer, used by chemists to compare the amount of light passed by a solution before and after the addition of various reagents. This H.760 *Spekker* instrument operates on a photo-electric principle, the amount of light passing through the solution under test being measured against the amount of light passing through a pre-set aperture.

Constructionally the instrument consists of a central lamp housing, ribbed for cooling purposes. To the right is the solution under test receiving light through a controlled calibrated aperture, to the left is the photo-cell with coarse and fine pre-set light adjustments. There are slides on each side for colour filters.

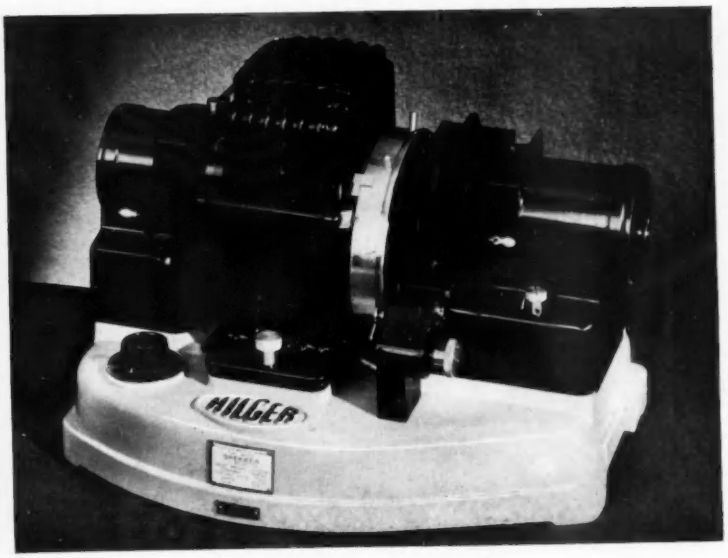
Among many excellent design features are the conveniently placed horizontal bar operating the shutters on each side of the lamp housing, and the grouping of controls on the left so that they and the shutter bar may be easily operated by the thumb and fingers of the left hand. The fine adjustment for the measuring drum on the right rotates in the same direction as the drum itself, to prevent hesitation on the part of the operator on passing from the coarse to the fine adjustment.

9: In different parts of the ordinary domestic oven the temperature varies considerably, and it is convenient to have a movable thermometer which can be used to measure the heat at any point. The Ryland thermometer has a circular dial inclined at a convenient angle for reading, with a supporting base large enough to span the bars of the oven shelves. The scale has clear lettering and the metal casing, by its simplicity and good proportions, gives the thermometer an appeal to the eye.

10: Smith's hand tachometer, used for measuring the speed of rotation of moving parts. In use, it can either be held against the end of a shaft or, by fitting the small wheel shown in the box, it can pick up the motion from the periphery.



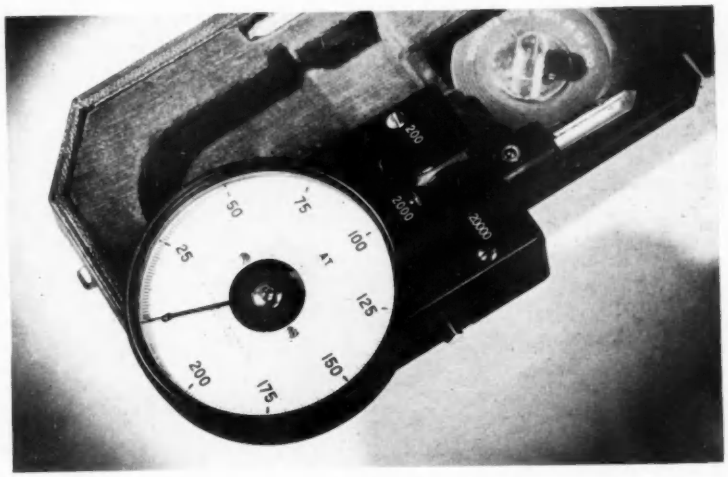
7: *Hearing aid by Amplivox Ltd*



8: *Absorptiometer by Hilger & Watts Ltd*



9: *Thermometer by Ryland Works Ltd*



10: *Device for measuring speed of rotating parts by S. Smith & Sons (England) Ltd*

The casing is die-cast from Mazak zinc-base alloy and fits conveniently into the hand. The very narrow bezel encroaches to the least possible extent on the scale, and the well-shaped pointer and clear numbering make the instrument easy to read without possibility of error.

11 (*illustrated on front cover*): This microptic alidade is used for plane-table surveying. In use, it is sighted through the telescope on to the feature to be plotted, and the line of position drawn on the table using the parallel rule incorporated in the base. For height measurement, the telescope can be elevated like a theodolite by using the knurled knob on the left, when a vertical scale can be read off through the microscope situated above the telescope eye-piece.

All adjustments can be made without the observer having to change position; only a small movement of the head is necessary to change from the telescope to the reading microscope, and an adjustable mirror over the spirit level enables this also to be conveniently observed from the operating position. The knurled controls can all be operated, if necessary, by a gloved hand, and the main pillar has been shaped to form a convenient hand-grip for carrying the instrument.

The alidade (made by Hilger and Watts Ltd) is constructed from light alloy and enamelled in a restful shade of green.

SIMPLICITY WITH A PURPOSE



Furniture to be made by native labour in Tanganyika

THE DESIGN OF a range of furniture to be made in East Africa by native labour has just been completed by Arcon, chartered architects, working in collaboration with Taylor Woodrow Construction Ltd, on behalf of the Overseas Food Corporation.

As part of its development plan for the southern province of Tanganyika, the Corporation has sponsored the erection of a saw-mill and joinery works to produce both prefabricated buildings and furniture. In the prefabricated houses, all necessary storage units are built-in as part of the structure; there are wardrobes in the bedrooms, cupboards and shelves in the living room, and store cupboards in the utility room. The range of movable furniture is therefore restricted to beds, tables and chairs of various types.

Several unusual factors guided the designers' approach and presented a challenge to their ingenuity:

1, *material* was limited to the locally available hardwood (chiefly muninga);

2, the *machinery* available was intended primarily for joinery manufacture;

3, native *labour* had to be used for both manufacture and assembly;

4, *glues* had to be avoided because of doubts as to their behaviour in the Tanganyika climate, and further doubts as to the reliability of native labour for such a critical task as assembly by glueing;

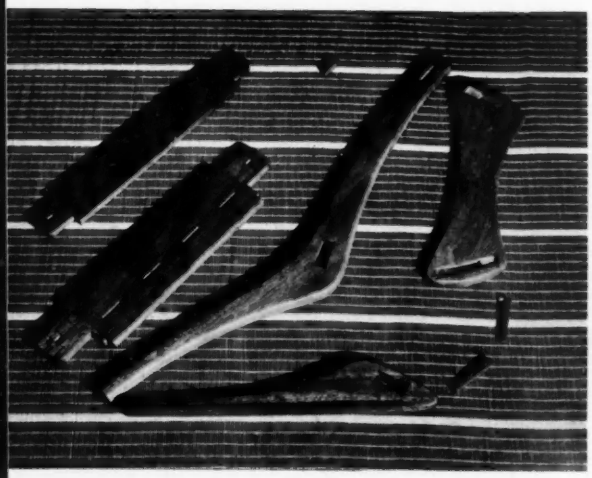
5, *upholstery*, to meet climatic conditions, had to be washable and avoid being stuffy;

6, maximum *interchangeability of parts* was demanded to simplify manufacture and also, by reducing the number of different parts to a minimum, to simplify recognition during assembly;

7, demountable furniture, to *pack flat*, was required, to lessen problems of storage and assembly.

The essential features of the chairs are the wedge method of assembly and the canting of front and rear rails to provide stiffness in two directions. In the assembled chair, the wedge joint looks comparatively simple; the subtleties are not visible. The detail of

In the development of the upright chair (below, right) the designers experimented with several types of seating before they adopted foamed rubber cushions as standard. Many of the wooden parts (left), as well as the cushions, are common to chairs of several types and to the small stool shown at top of page









Simplicity of construction—one of the designers' main aims—is evident in this suite of demountable furniture. Many parts of the armchair on right of the room above are interchangeable with the settee

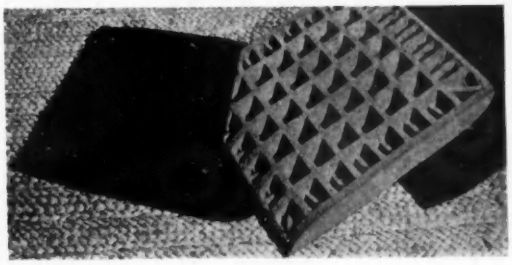
the joint can be seen only when the chair is dismantled to show the tongue in the leg element and the corresponding groove in the side-rail element. This groove and tongue are designed to take up a torsional strain which, if transferred by the projecting toes of the front and rear rail, would cause the legs to split. This wedge assembly is used for both upright chairs, armchairs and settees, but in the armchair and the settee, as distinct from the upright chair, the side rails are arched up to receive arm-rests, a horizontally driven wedge being used to secure the arm-rest to the side rail.

The upholstery consists of a webbing harness to which a foamed rubber cushion in a linen cover is attached by press-studs. The harness transmits all loads to the timber framework (which is appropriately slotted to receive the webbing, the harness being tensioned during the assembly operation). In both armchair and settee, seat cushion and back cushion are interchangeable: two cushions are used in the chair and six of identical pattern in the settee. The linen cushion-covers are designed envelope fashion so that they can easily be removed for frequent laundering—a necessity in hot countries. The foamed rubber cushions are simply slipped into them.

continued overleaf







Illustrations on right show (above) settee framework fitted with webbing harness; (centre) the complete settee, with cushions held in position by press-studs on the harness; (bottom) foamed rubber cushion; the envelope-type linen cover is easily removable for laundering



SIMPLICITY WITH A PURPOSE: *continued*

The tables are built of two separate assemblies, a leg and rail assembly, and a table-top assembly with or without drawers. The leg and rail assembly is similar in principle to the chair frame, while the table-top assembly employs a form of construction like that used in drawing-boards—planks tongued one into another and held together by cross-battens. The connection between leg-framework and table-top is effected by timber turnbuckles.

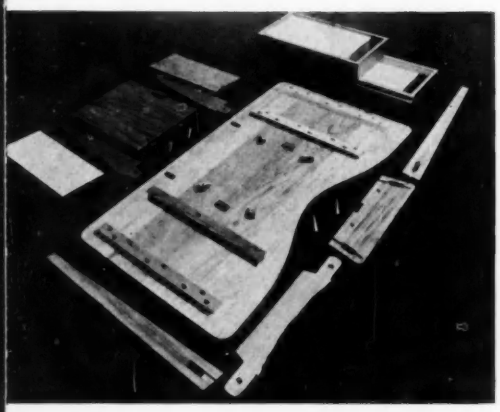
There are several types of table—a dining table, occasional tables in two sizes, a two-tier table for bedroom use, a typist's table and a dressing table, the two latter being very similar except that the dressing-table top is shaped and provided with supports for a triple mirror. In all table tops there are V-joints between the individual planks because it is accepted that the climatic conditions of Southern Tanganyika are such that dimensional stability cannot be guaranteed.

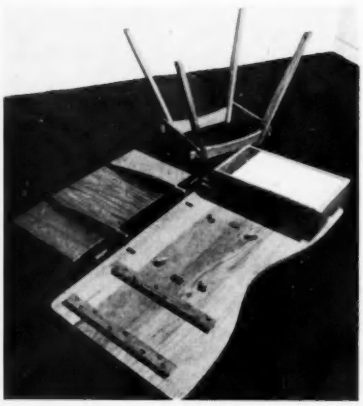
An interesting detail of the typist's and dressing tables is the method of hanging the drawers. The two-drawer "nests" hang directly from the cross-battens of the table-top assembly, and the lower drawer in each "nest" is hung from the upper drawer. Thus, to get at the top drawer, both drawers must be pulled out; the lower drawer, however, opens independently. Time alone will show whether this assembly proves satisfactory in use: it represents a considerable economy in manufacture.

While the table-top and drawers are screw assembled, all the framework members are wedge assembled. The rather unsophisticated wedge technique was adopted because it has affinities with East African tradition and because it is relatively foolproof. At the same time, it has its disadvantages, the chief of which is that the tongues through which the wedges are driven have to be large enough to hold them without risk of splitting. Thus the members which receive the tongue must be larger at the point of junction than would be necessary if the joint were, for example, glued.

For production in Britain—and possibly later for African production—a different joint has been devised, based on the use of dowels and a concealed locking screw. This new development would cut production costs and reduce the amount of timber used in each item of furniture, but in achieving this economy, the furniture would lose some of the robustness which in the original design is one of its most notable characteristics.

Stages in the assembly of the dressing table. It uses the same method of construction as the dining table and many of the same components as the desk shown at top of page, from which it differs in two respects only: the fitting of a mirror, and the shaped front. In both pieces, the lower drawers are hung from the upper ones, a simplified form of construction which appreciably reduces production cost







DESIGN IN THE DAIRY: 2

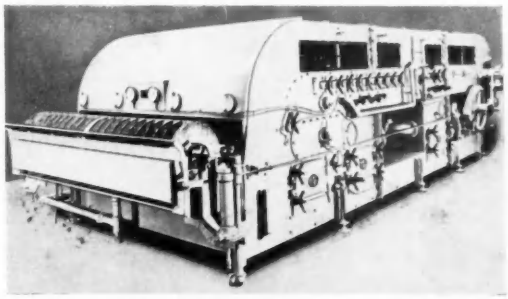
Last month DESIGN described how a bottle-filling machine was redesigned. This article discusses the improvements made in a new bottle-washing machine from a different maker

THE NUMEROUS REQUIREMENTS with which a bottle-washing machine must comply make the evolution of an efficient and good-looking machine no easy task. Basically it must consist of loading and discharging gear to feed dirty bottles into the machine and deliver clean bottles onto a conveyer after treatment, carriers for transporting the bottles, tanks for soaking them in water and detergent, spraying jets to rinse them at varying temperatures, a drive for pumps and bottle carriers, and timing mechanism to govern the rate of progress through the cleansing cycle. All these elements must be arranged in correct and compact relation to one another, yet they must be easily accessible so that the tanks can be cleaned and debris easily removed.

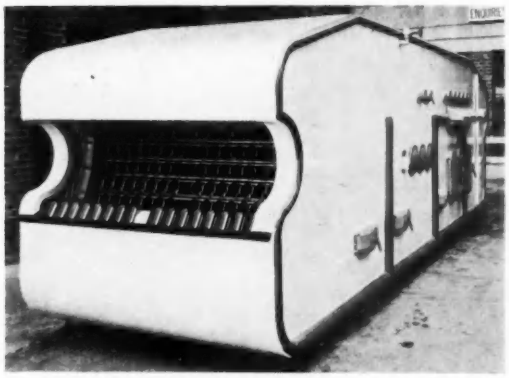
To meet these requirements, the Graham-Enock Manufacturing Co Ltd have produced the new GEM bottle-washing machine in which the use of fluid drive (oil at 500 lb pressure) has enabled the rods, levers, gear wheels, pulleys, clutches and gear boxes of a purely mechanical drive to be eliminated. Instead, a central power unit is housed in a convenient position and connected by relatively small-bore copper piping to points where movement is required. As a result, the designers have achieved an exceptionally clean-looking exterior without having to conceal awkwardly shaped parts in an outer casing. Even the beading around the edge, for much of its length, forms piping for the rinsing liquids.

The rinse pumps are not worked by the fluid drive, but they have been arranged in a group driven by a single belt from an electric motor of standard speed and type. They are recessed and shut off from the operator by steel doors for safety.

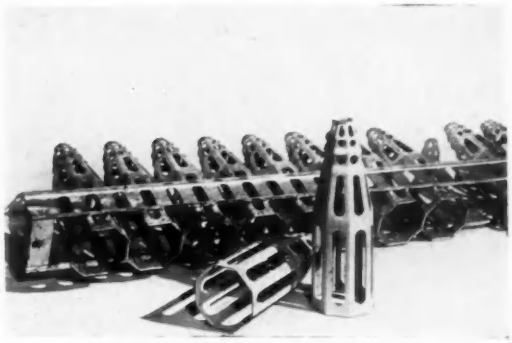
Other features of the GEM machine include a rubber loading wheel to avoid breaking and chipping of bottles at the feed end, flood-lighting of the loading and discharge mechanisms, a very neat instrument panel with matching dial thermometers showing the temperatures of the various rinse solutions, and adjustable feet which enable the machine to be set up anywhere without a special foundation.

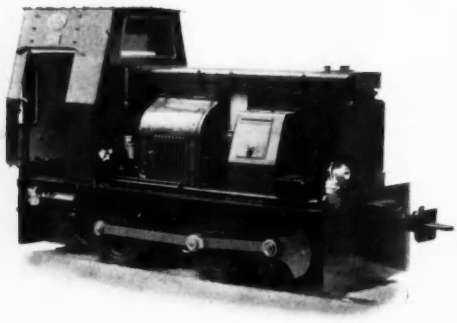


The new GEM machine (below) compares favourably, in cleanness of outline, with its predecessor (above). Mechanism, as well as housing, has been redesigned

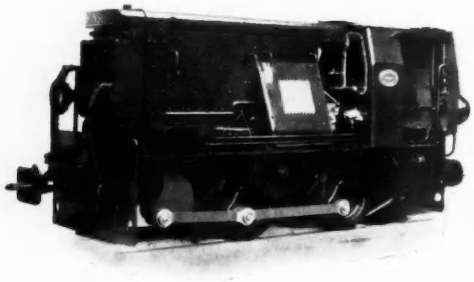


Bottle baskets (below) are octagonal to allow plenty of water space round the bottle during its transit through the machine

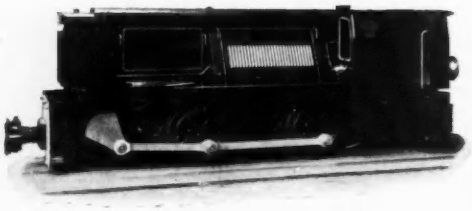




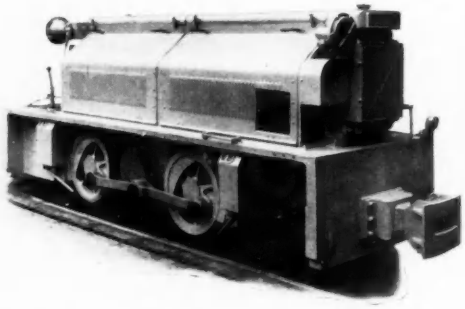
1939: *The original 25 h.p. locomotive*



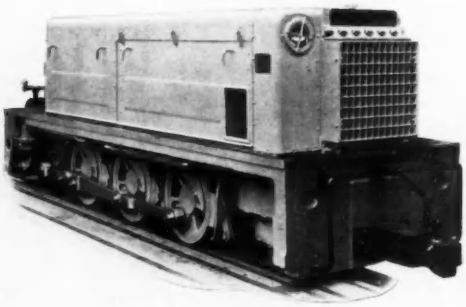
1940: *Modifications included lower cab, requiring less headroom*



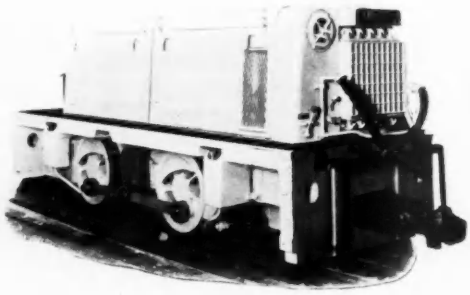
1941: *More power and a cleaner outline*



1945: *Entirely redesigned; no driver's cab*



1946: *Power doubled, headlamp integral with main body*



1947: *Sloping sides avoid the square look of earlier models*

Locomotives for the coal mines

Ten years' progress in the design of fully flameproof Diesel locomotives, suitable for the special conditions prevailing in British mines, summarised by John F. Alcock*

THE FULLY FLAMEPROOF Diesel locomotive for use in coal mines is a peculiarly British engineering achievement, made necessary by the gassy atmosphere in many mines. Until 1939 no locomotive of this type was made in Britain; the first model, introduced in August 1939 and still working at Crombie depot, was a 25 h.p. locomotive built by the Hunslet Engine Co Ltd.

Since that date the firm's engineers have gradually cleaned-up the design, not merely without impairing efficiency, but with improvements in cleanliness and in accessibility. In 1940 the first improved model was introduced; among other changes, the cab was lowered, partly to give a better outline and partly also to take up less headroom—an important factor in the underground galleries of the mines.

A 50 h.p. locomotive, introduced in 1941, showed a further simplification of line, and both this and the 1940 model were built in considerable numbers during the war, while design-development was necessarily at a standstill.

In 1945 an entirely new 50 h.p. locomotive was produced. The whole frame structure was made as a one-piece casting, instead of being riveted. In this design there was a drastic change in appearance as the cab was removed altogether. Experience had shown that a closed cab was unnecessary, that it was in the driver's way when climbing in and out, and that it restricted his field of vision. Moreover, to be in a small gallery hundreds of feet below the surface is bad enough, without being shut up as in a box, and there is no doubt that doing away with the cab benefits the driver psychologically.

From the 1945 model a further locomotive of twice the power (100 h.p.) was developed in the following year. Here for the first time the electric lighting was integral with the main body; also rods, shafts and chains were enclosed. At present this is the largest and most powerful underground locomotive available; its weight is 15 tons.

It was subsequently decided that new locomotives of smaller power should be designed on the same lines. The 65 h.p. unit introduced in 1947 reflects this decision; though there is a general similarity, comparison with the previous year's design shows that the main casing has been given a slight inward slope to avoid the look of squareness. A 1948 model (70 h.p.) follows similar lines, but in this the controls have been improved; all control handles now have ball-ends and these are standardised in two sizes. In earlier designs, only the heavy controls were ball-ended.

Although such fundamental changes in appearance have been made during 10 years' development, many of the details of the newest underground locomotives are still interchangeable with those of the original design.



Hauling loaded tubs in Beoch Mine, Ayrshire; a photograph that gives some idea of the conditions in which the flameproof locomotives are designed to operate. Seen here is Hunslet's 65 h.p. 0-4-0 model of 1947

* Joint Managing Director, the Hunslet Engine Co Ltd

NEWS OF NEW PRODUCTS



Design helps the cripple

WOODEN CRUTCHES with underarm pads are usually clumsy in use and in appearance. In the new model illustrated on left, the use of aluminium alloy and urea has made the crutch extremely light, while the black plastic finish makes it inconspicuous.

About two years were spent on research and experiment before the final model, passed by the National Physical Laboratory as capable of bearing a weight of 25 stones, was approved. Throughout, thoughtful design has been brought to bear on the human and commercial problems involved. The hollow shaft is detachable so that the crutch will fit into a week-end case or a desk-drawer, or between seats in a car ; shafts of different lengths are interchangeable. The handle is shaped to cradle the hand; its surface is hard, smooth and non-porous. The elbow piece can be bent to the shape desired and is made of Alclad-base plastic. There is no padding, as the designer decided this has only a psychological advantage—and that only in the early stages of convalescence.

Designer, H. M. Smith; manufacturers, Mectronic Developments Ltd.



Aluminium floodlamp

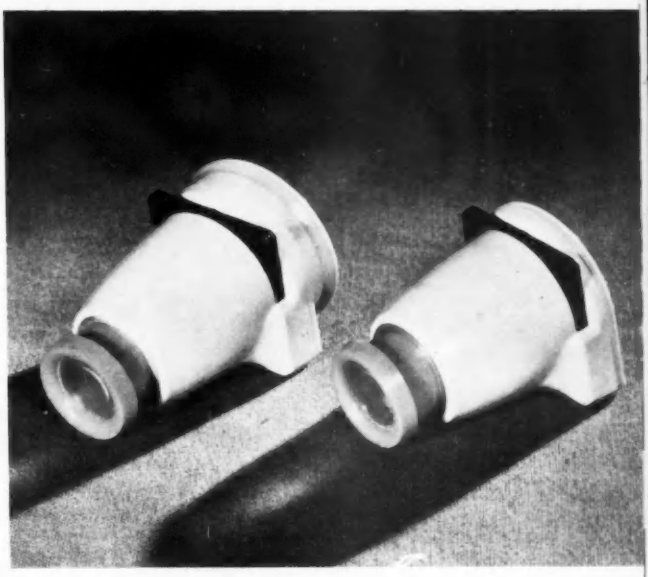
Aluminium is used for both reflector and base of the new flood-lamp, on left, which has been designed with a view to display and exhibition uses.

It is primarily intended to provide indirect decorative lighting for ceilings or murals, or as a floodlight for hotel lounges, reception halls and lobbies, stage and window displays.

The reflector is spun from aluminium and the base is stamped from the same material. The reflector is matt-finished outside and stove-enamelled white inside. It is joined to the base by a collar of brushed copper.

The lamp was designed by W. M. de Majo, MSIA (assistant, P. Harvey). It is produced by Stage Electrical Equipment Ltd and distributed by London Industrial Art Ltd.

Modifications with a purpose



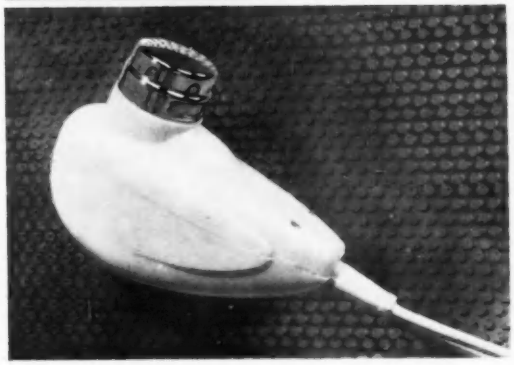
The Jafro viewer, a device for viewing photographic colour transparencies, is an all-plastics product, first designed in 1947. Though the original design was good, experience showed that it could be made even better, and a number of modifications have now been introduced. The original tools for body and eyepiece—suitably modified—are still used.

In the newer version, on left of photograph, the eyepiece is ribbed for easier adjustment; the viewing screen, of acetate sheet, has been moved forward so that its grain does not show; it now has a circular housing instead of a shaped one; a slot has been incorporated in the underside to enable 35-millimetre film to be viewed.

Designer, Ronald E. Brookes, MSIA. Moulded by Brookes and Adams Ltd in grey Scarab and red Beetle. Distributors, John Frost, Sutton Coldfield; Neville Brown & Co Ltd, London.

A shape to fit the hand





While taking no side in the battle of electric *versus* non-electric shaving, DESIGN notes with interest the growing number and improved design of electric dry shavers now on the market. New to Britain is the Philishave, which works on an unusual principle as it has a six-bladed *rotary* cutter.

The form of the Philishave is especially interesting, for its designer has tried—successfully—to evolve a shape which will fit the hand snugly and be comfortable to hold. Convenience in use has also been considered in other aspects of its design; the Philishave is quiet in operation and easy to clean, and it can take its current from either power or light plugs on AC or DC circuits of any voltage. (An adaptor is supplied for use with light plugs.) The body is moulded in ivory-coloured urea.

The shaving head contains the six-bladed rotating cutter, beneath a plated guard which has slots arranged radially. A slight turn of this guard opens up the chamber in which hairs accumulate during shaving, and they can then be blown out. For more thorough cleaning, the complete shaving head can be unscrewed and taken apart.

For safety, the shaft driving the blades is made of a non-conducting material, to insulate the head from the electrical circuit. To protect the shaving head from damage when not in use, a metal cap is provided.

Manufacturers, Philips Electrical Ltd.

DESIGN OVERSEAS

US competition for design of dinnerware

THROUGHOUT 1950 an exhibition of dinnerware designs will tour America and will include the prize-winners in a competition held at the end of last year under the sponsorship of the Syracuse Museum of Fine Arts, New York, and Commercial Decal Inc, makers of ceramic lithographic transfers. The aim of the competition was to attract American artists to ceramic design; consideration in judging was to be given to ease and practicability of application for mass production. The three winners are all well-known painters of the contemporary school; none of them, it may be noted, scored as a winner in a popular vote taken at the first showing.

A correspondent writes: "The designs have not yet been put into production and no indication is given as to whether they are intended for reproduction freehand, by lithograph or print and enamel. It is therefore difficult to judge whether they would be satisfactory on the production side.

"If marketed in Britain, the designs would find little favour. None is intended to fit a plate with a rim, which is the only shape really satisfactory for dinner use. Moreover, British practice is to leave the well of the plate free of pattern, except perhaps for a small motif, in the interests of gastronomy. (Perhaps the American dinnerware is destined for the china cabinet, not for use.) In themselves, the designs are sometimes amusing, sometimes clever, but all derivative. Many of them suggest end-papers and book decorations rather than ceramics."



Dinnerware designs; first prize (top) and honourable mention

New book on Swedish glassware designers

The Publications Department of Svenska Slöjdföreningen (Swedish Society of Arts and Crafts) has published the first of a series of books which will deal with the pioneers of modern industrial design covering the period from about 1917. The material in this series is presented biographically and is extensively illustrated with photographs. The first volume, *Simon Gate —Edward Hald*, relates the importance of these two designers in establishing the firm of Orrefors as one of the leading glass manufacturers in the world. During their association, lasting over a quarter of a century, the studio was the heart of the works.

Their greatest achievement was in the development of Graalglas, based on the technique of Kurt Bergqvist. The possibility in this form of decoration was seized on by Gate and developed to the utmost. When Orrefors exhibited in 1930 at Stockholm, their work was greeted with wild enthusiasm, as opening up a new perspective in glass-making, both artistically and technically. It has been said that it brought together the expressionism of the decade 1910-20, the classicism of the 'twenties, and the pursuit of new material effects of the 'thirties.

Gate and Hald showed an incomparable mastery in the use of engraving and sand-blasting as means of decoration, but did not neglect pure form, particularly in the production of articles for use at a reasonable price.

The two worked so closely that it is difficult to distinguish their work. Gate's shows a more vigorous, forceful quality, while Hald's is distinguished by a sensitive and lively imagination.

A commentary by Erik Wettergren assesses their importance in the advancement of glass design. The book is edited by Arthur Hald. H. L.



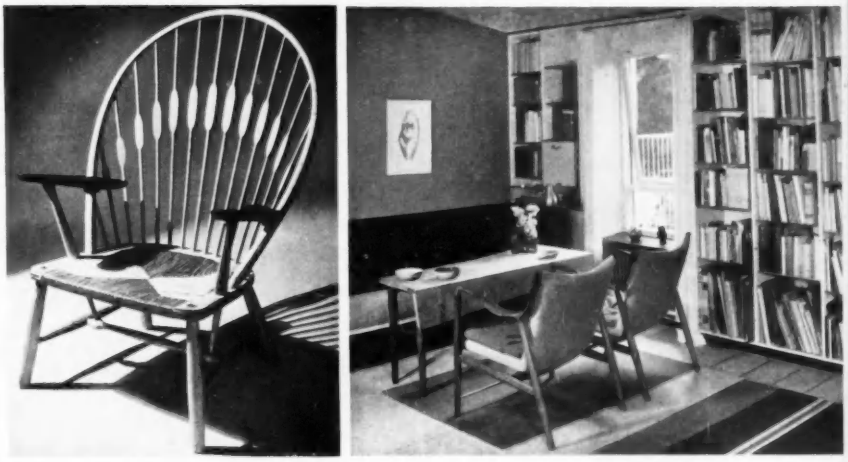


Two illustrations from the book reviewed above—the bowls designed in 1922, the globe in 1930, both by Edward Hald. This engraved celestial globe was acclaimed as a new landmark in glass design when it was shown at the 1930 exibition in Stockholm

Danish design in London

An exhibition, Danish Architecture of Today, is being held (until 29 March) at the Royal Institute of British Architects, 66 Portland Place, London W1. Illustrations of factories and commercial buildings are included—among them, the showrooms of Bing & Grøndahl which are also illustrated on pages 8-9 of this issue. Finn Juhl, designer of the showrooms, is one of the architects responsible for the exhibition, which is sponsored by the Akademisk Arkitektforening.

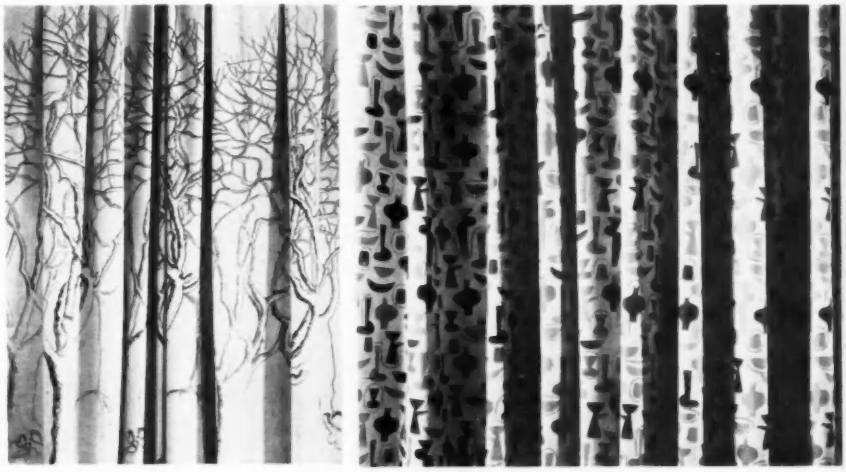
A few specially selected examples of industrial design are included, consisting mainly of articles produced since the exhibition of Danish Domestic Design held at the RIBA in 1947. The light fittings used are also all of Danish manufacture.



Chair designed by Hans J. Wegner, and cottage furniture by Finn Juhl, from the Danish architects' exhibition

New US fabrics

A collection of printed fabrics for drapery and upholstery use has been produced by the Mil-Art Company of New York in an effort to bring good contemporary design into the homes of the middle income group. The six designers are: Salvador Dali, painter; Ray Eames, sculptress; George Nelson, architect-designer; Bernard Rudofsky, editor-designer; Abel Sorensen, architect-designer; and Edward J. Wormley, furniture designer. Each design is available in three different colour schemes. All the fabrics are vat-dyed, colour-fast and 50 in. wide, with a pattern repeat of 27 in. or a multiple thereof. Prices range from $3.95 upwards. Thirty photographs of the set can be seen in the Council of Industrial Design Photographic Library.



"Trees" by Edward G. Wormley and, right, "China Shop" by George Nelson

The trend of North American taste

The Canadian Daily Newspapers Association recently issued the results of a household inquiry into the demand for imported merchandise, dealing with article by article in all major towns.

Inquiries into design features showed 68 per cent of the people questioned finding US merchandise "very attractive," with only 7 per cent giving the same credit to British goods. The best our designs can claim is that 48 per cent found British merchandise "serviceable but could be improved." Unfortunately, but perhaps inevitably, a statistical inquiry of this nature gives little help in the details of design improvement.

The trend of American taste is perhaps more clearly shown in this report from *Time*, 30 January: "The January Midwestern furniture displays had the new look. In mahogany-bound Grand Rapids, Mich, strongest citadel of period-piecing in the U S, last week's displays by old-line manufacturers showed that over half of them had added handsome, well-designed modern to their quality period products. It was the same kind of story at Chicago's winter furniture exhibitions, showcases of a large part of the rest of the U S furniture industry.

"The 74-year-old Widdicomb Furniture Co. had been the first big Grand Rapids producer to go completely contemporary. In 1942 it hired star Manhattan designer Terence Harold Robsjohn-Gibbings, . . . an outspoken critic of both fake antique and engine-room modern, to match the best Queen Anne and Louis Quatorze with sleek modern. By this year most other companies had gotten into the act, were turning out their own handsome lines in native American woods."

LETTERS TO THE EDITOR



Its curves caused controversy: the refrigerator referred to by Harold Van Doren

Streamlining: fad or function?

The article by Harold Van Doren in DESIGN (No 10) in which he defended "soft" curves on technical grounds has aroused wide interest among designers on both sides of the Atlantic—a fact which has been reflected in readers' letters already published in DESIGN (Nos 11, 14). Below, the author replies to correspondents' criticisms. EDITOR.

QUITE A BIT of comment has been caused by one statement in my article "Streamlining—Fad or Function?" in your October 1949 issue. This comment has come not only from abroad but from some of our own US designers who read the magazine.

In describing the minimum radius possible at the upper corners of a tangent-bent refrigerator shell as 3½in., I probably should have been more specific. This radius has been established in practice in several plants where the "S" or "Dutch" bend is used along the entire front edge of the shell. This type of bend, which receives the laminated plastic breaker strip, takes three thicknesses of metal. At the corners, one thickness is usually bitten out in a special operation, but even the two thicknesses make it very difficult to bend around small radii without buckling or wrinkling of the metal. This wrinkling might not be too important were it not for the fact that the corner is in a very prominent position when the refrigerator door is opened. If the metal wrinkles, each shell has to be gone over with hand-grinding machines to produce a smooth surface. Since this hand labour comes very dear, it is preferable for the radius to be 3½in. or more. Therefore, the limitation is purely one of economics.

General Electric [USA] use a much smaller radius on their refrigerators. I am informed by Arthur N. BecVar, SID, head of GE's styling department, that the production department objected strenuously to the hand work involved but was finally overridden by Management on the grounds of appearance only, in spite of cost.

Mr Pinto comments that a refrigerator with a curved top does not fit readily into the average kitchen scheme. He is quite right. Let him be assured that I hold no brief for the particular shape, size and arrangement of the American refrigerator. In fact, as far as its general appearance goes, it is little more than the old-fashioned ice-box. On our drawing boards are radically different refrigerators but it may be some years before they see the light of day. We ourselves, at least, think them far more logical than the present design.

When I wrote that "the top may be flat," I added: "but it is preferable to have a certain amount of camber to avoid the appearance of being 'dished'": of course, to avoid the dished appearance, the curvature need not be extreme.

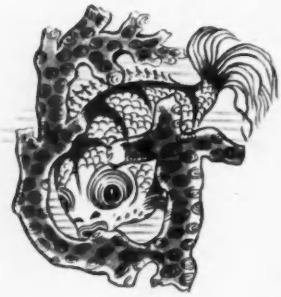
There is another functional reason for the extra amount of curve at the top in most American boxes; this is where the cold control mechanism is inserted. Still another reason—which may or may not appeal to Mr Pinto. Curvature prevents the refrigerator top from becoming a catch-all.

Incidentally, I should have mentioned in my original article that the Struthers-Wells tangent bender [the equipment used for obtaining 3½-inch curves at corners] was engineered and designed by Designers for Industry Inc, of Cleveland, Ohio. It was developed by that organisation, and they control the patents.

HAROLD VAN DOREN, SID
Philadelphia, Pa.

Decorative design in plastics

SIR: In DESIGN for January (No 13, p. 3) you reproduced a design of mine on a plastic panel. I am venturing to add some further details to your necessarily brief caption, as I feel that many designers and patrons of design may like to know more about the process.





Two experimental designs in Warerite by Enid Marx, RDI. Laminated plastic materials such as this provide "the very interesting possibility of combining mass-production technique with individual designs," Miss Marx writes. Illustrated on left above is one of a series of decorative alphabet panels which she designed for nursery schools: waterproof ink, Indian ink, chalk and water colours were all used in it

This design, as I expect you know, was done on Warerite, one of the new laminated plastic boards. It was drawn by me direct on to the panel: indeed I did so largely with a view to showing the remarkable possibilities of these plastics. It is perfectly possible for anyone to choose an artist and commission him to draw an exclusive design direct on to the panel (if one could afford it, one could have an original Picasso drawing). The design is indelible, being actually incorporated into the material itself. Moreover, it is possible to make the surface heat, fire and stain-proof. We thus have the very interesting possibility of combining mass-production technique with individual designs, which is, indeed, the great problem set to us industrial artists in this machine age.

Any experiment, in these days of mass production, which can provide individuality in detail whilst maintaining the economy of mass production of parts, is, I feel sure you will agree, worthy of full support. The present restrictions on the home market, which we need as a trial ground for new ideas, make it exceptionally difficult to pursue such experiments as we ought to, so that it is particularly helpful if your paper can draw attention to what has been achieved so far.

London NW8 ENID MARX, RDI, FSIA

British and American packaging

SIR: In recent months much has been said and written about packaging design for the American market. From personal observation it seems to me that certain fallacies crop up in many of the speeches and articles on this subject.

We are often told that British packaging gives inadequate protection to the goods. This is based on complaints of damage, but we are inclined to forget that the majority of goods reach the market undamaged. At the same time, protective packaging in this country tends to be heavier and "antiquated," while Americans make clever use of up-to-date materials and new developments, giving equally safe protection with packaging which is lighter, easier to handle and simpler to open.

On the question of appearance-design there are two strongly supported views:

(*a*) to sell in America you must pack in the same style as the Americans,

(*b*) the more English-looking your packs are, the better.

Either can be right or wrong, according to the nature of the goods you are packaging. For a product of distinctly British—or distinctly "imported"—character, or one that cannot possibly compete on a price basis with American products, the package design should give some suggestion of overseas origin. It must be what the Americans think of as English in character—and this suggests well-known landmarks or scenes, symbolic designs (Grenadier Guards, tartans, tri-colour chevrons) or other "traditional" patterns. At the same time, even if subjects chosen for illustration may be traditional, the treatment should still be contemporary.

If, on the other hand, yours is a product selling on its merits at a competitive price, then your package should have the same characteristics as its American competitors, *because American packaging technique and materials are sound*, not because you need to ape American style, nor, indeed, because there is such a thing as an American style.

It is not easy to classify first-class present-day package design into national style groups. There is only good or bad design, and the good design will almost invariably be of international style or standard. The package designer's problems of providing protection, indication of contents and ready recognition of the brand-name, are the same in every country.

When it comes to originality, cleverness or unusual design, in good taste, even Americans agree that in a representative selection of designed packs the *outstanding* examples will often be of British or Continental origin. On the other hand, looking at the *average* pack, the American pack will generally be better designed: it will rate a higher sales-appeal factor, be better produced and made of superior material. It is as well to remember that in the US market, higher-priced articles will not sell at all unless their packaging is attractive, and while good packaging adds something to costs it adds far more to saleability.

London SW3 W. M. de MAJO, MSIA

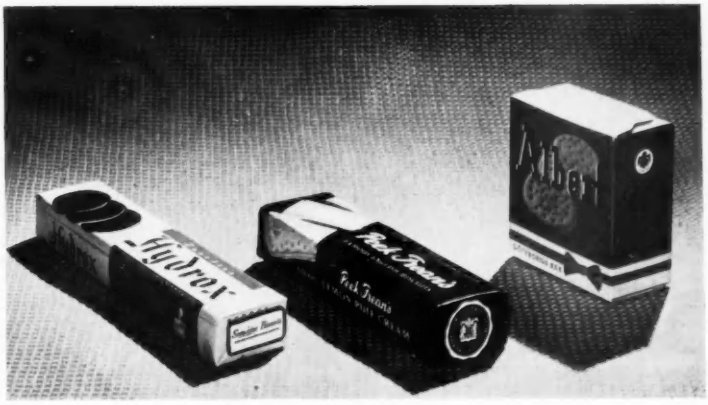
Pleasant to live with?

SIR: I have been an interested reader of your journal since it was started, and must comment on the Italian bureau shown in the January issue (No 13), p. 8. The inference, from the fact that it is being illustrated, is that it is considered a satisfactory article. Whilst in some respects its appearance is pleasing I cannot think that it would be pleasant to live with, as I am sure that the projection of the front legs would result in their being kicked every time the user tried to get in or out of the sitting position.

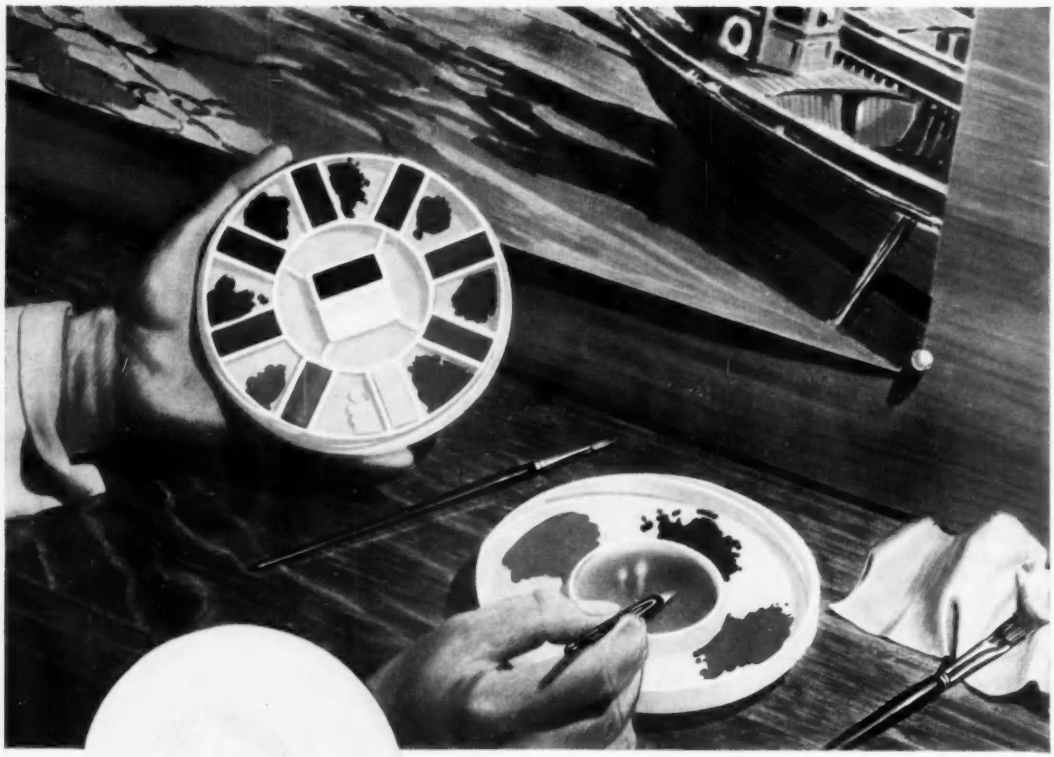
I think it is the fact that the legs slope back from the point of support rather than the actual position of the point of support which disguises the amount of the projection.

A. B. COOPER
Managing Director,
Strachan & Henshaw Ltd
Bristol

• We would have preferred Mr Cooper to infer that the writing-desk was of sufficiently *interesting* design to justify publication—not necessarily that it was of completely *satisfactory* design. His criticism, we believe, provides an answer to the question we asked in January: "Would it be pleasant to live with?" EDITOR.



This picture adds point to W. M. de Majo's comment, above, that there is no such thing as national style in package design. All three biscuit cartons display the name in distinctive lettering, and all carry realistic illustrations of their contents, in colour; but they come from three countries—the United States, Great Britain, Sweden. (Photographed by Dennis Hooker, ARPS; the British pack—for export—designed for Peek Frean's by Richard Lonsdale-Hands Associates)



This Winsor and Newton Ostwald Circle colour box sets a new standard in paint box design. The 'circle' theme is to conform to the theory of the Ostwald colour system in which the colours are arranged chromatically equidistant. The box is moulded in Beetle by Illingworths (Plastics) Ltd. Note how the radial divisions between the paint containers and palettes form natural strengthening ribs.

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Industrial Design Abstracts

Australian furniture [A]

Inspired by the designs of Swedish and American furniture, original domestic furniture is now being made in Australia. Until recently Australian taste in furniture has been conservative, and suites of no particular style, or period copies, have swamped the market. The new designs are simple in style, but avoid severity. Australia has a wide range of furniture hardwoods to choose from, ranging from coachwood to red cedar.

Furniture & Furnishings, Toronto, December 1949.

Danish lamps [A]

Four Danish designers of lampshades and lighting fixtures recently discussed the present state of design in this field. Poul Henningsen, one of the best-known lamp designers, deplores the loss to Denmark of the German market, which was culturally related to the Nordic countries. He regrets the tendency of much modern work to be merely imitative with extraneous decoration which does not arise naturally from the basic design.

Dansk Kunsthaandvaerk, Copenhagen, December 1949.

Fine British fabrics [A]

Many developments have been made in British fashion fabrics, writes Alison Settle. In rayon, an entirely new process of spinning has cut down handling to one continuous process, so reducing the possibilities of faults in the yarn. Spun-dyed viscose yarn, that is, rayon dyed in solution before it becomes a thread, ensures greater colour fastness and subtler shades, even in inexpensive cloths. In fabric designing there is a tendency for the noticeable pattern to disappear in favour of something that gives the appearance of fabric interest, rather than of actual patterning.

Britain Today, February 1950.

Flower and leaf motifs in textiles [A]

John Barker considers that flower and leaf motifs in textile design have largely become crude and careless. William Morris turned to the simple classical forms used in the Italian Renaissance, as they suited wood and linoleum block printing. In view of the present-day excellence of printing and materials the variety of Elizabethan embroidered plant forms should be of particular interest for designers, and so too should eighteenth and nineteenth century botanical prints, because of the discipline of the engraved and hand-coloured methods and their exclusion of non-essentials.

Rayon & Design, December 1949.

Indian textiles [A]

The Calico Museum of Textiles in Ahmedabad was recently started by Gautam Sarabhai to serve "as a substructure for the future edifice of a living Indian textile art." Modern display methods present historical and technical developments from the earliest times. The Museum includes a survey of Indian textiles and costumes, shown by actual examples, models, drawings and photographs, and is conducting research into the development of certain famous historic designs, such as the Gujerati textiles.

Marg, Bombay, No. 4/1949.

Inger Møller, designer in silver [A]

Silverwork designed and made by Inger Møller shows that she is first and foremost a functionalist and her work is only slightly decorated. While Georg Jensen might be described as an individualist in harmony with the past, Inger Møller is an individualist in harmony with the present. Although the average standard of applied art in Denmark is high, designers are not sufficiently courageous; the works of Inger Møller, a truly creative artist, are therefore the more appreciated.

Dansk Kunsthaandvaerk, Copenhagen, January 1950.

Laminated plastic veneers [A]

Notes on the nature and application of laminated plastic veneers and panels include details of the four principal methods of reproducing special designs in this medium. For designs likely to be seen at close range, letterpress or silk-screen printing is best. For the latter process the design should be simple, and in as few colours as possible. Letterpress printing is the best method for long runs of "interlaminate-printed" notices and labels. Engraving and inlaying can also be used successfully, though care is needed.

RIBA Journal, January 1950.

Metal spinning [A]

It is now possible to spin almost all metals, and by this method shapes otherwise difficult and intricate to form can be produced. Examples of such shapes are radar antennae, lighting reflectors and parts for jets and guided missiles. Until recently spinning was a costly process, but as a result of a series of operational studies of speed, diameter and material, spun parts have become a means of reducing costs and improving products.

Materials & Methods, New York, December 1949.

Pietre intarsiate [A]

The art of inlaying and laminating fine stones in a background of stone, using the colours and markings of the different pieces to form an intricate pattern, has recently been revived in Italy by Richard Blow, who has organised a workshop at Montice. With the aid of two designers, Eva Carocci and Constantino Nivola, he has produced entirely new designs, some of which are going to America in the form of lamp vases, table tops and boxes.

Interiors, New York, December 1949.

Reform for American cars [A]

General dissatisfaction with the current American car bodies causes American designer Brook Stevens to look to the past for good design points. He considers the time opportune for this, now that the consumer public is turning against over-large, pseudo-streamlined cars. He believes that the vertical should be emphasised again, giving good door openings and higher windows. Loss of visilibity, excessive overhangs, the extreme rake of the modern American screen which necessitates sun visors, and instrument panels that virtually require a knowledge of Braille at night, are all points he thinks ripe for reform.

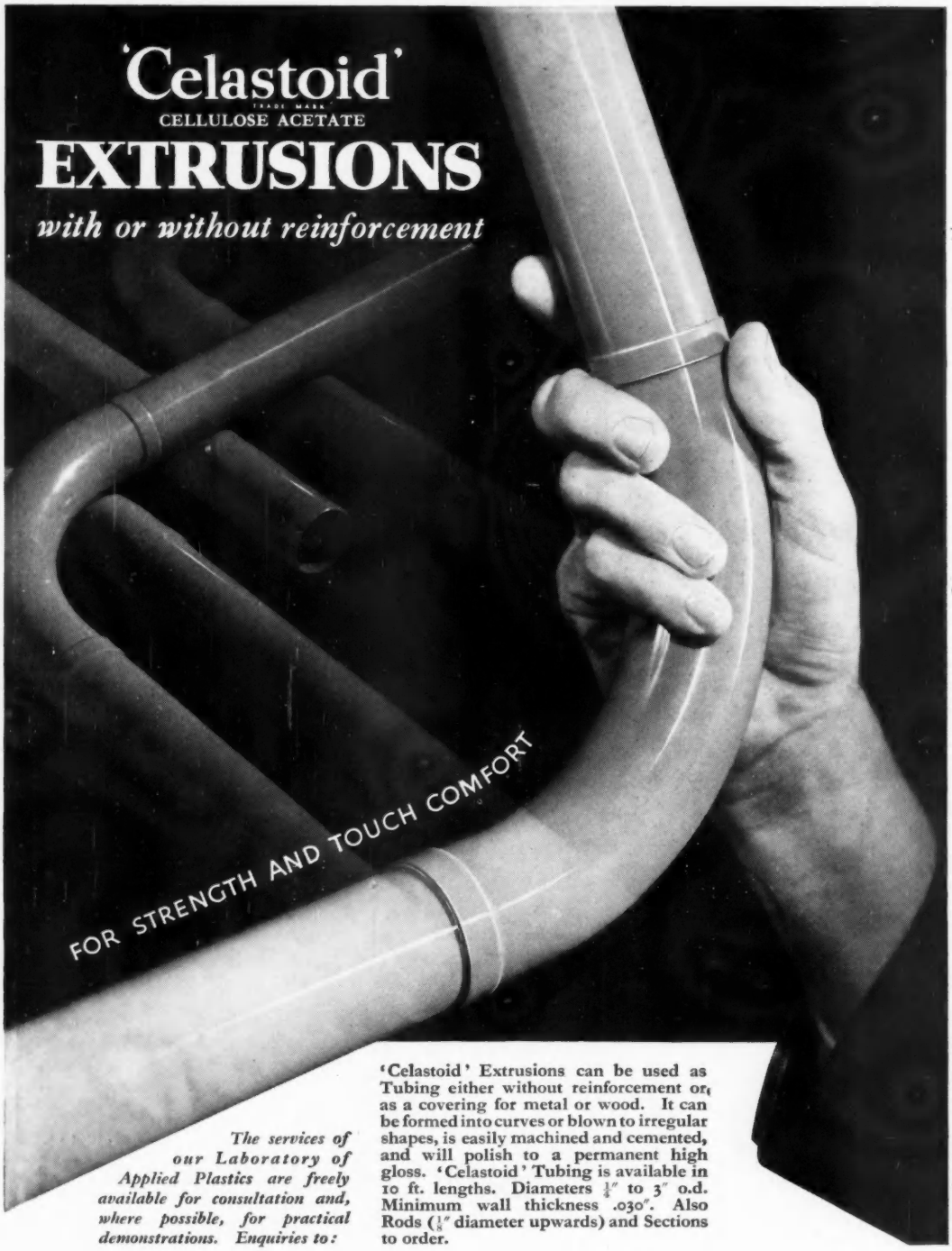
The Autocar, 6 January, 1950.

Wallpaper [P]

Three pamphlets on wallpaper deal with its history, manufacture and the importance of colour. The techniques of producing and applying wallpapers are described, and developments of different types (such as flock paper) and styles (*e.g.* Chinese painted papers, and French scenic papers) are discussed.

The History of Wallpaper; The Manufacture of Wallpaper; The Importance of Colour; The Wall Paper Manufacturers Limited, Manchester.

The letter appearing in the title of each abstract indicates the form of the publication from which that abstract is taken: [A] article or articles in a periodical; [B] book; [P] pamphlet; [S] supplement or special number. Place of publication is London unless otherwise stated. All publications mentioned above can be seen in the Library of the Council of Industrial Design.



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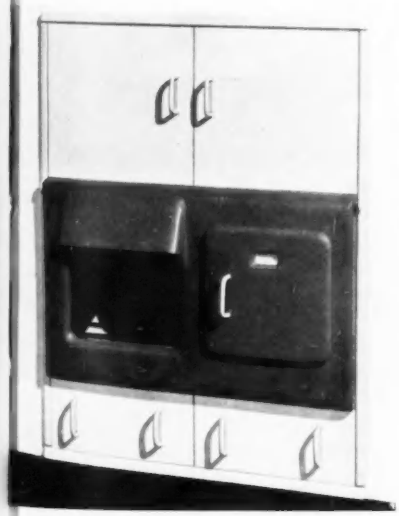
Philip G. R. Whalley

IT IS WITH very great regret that we record the sudden death of Philip G. R. Whalley, which occurred in Liverpool on 28 February at the age of 48. Mr Whalley was an original member of the Council of Industrial Design and during the period of five years since it was set up—always a difficult period in the life of any organisation no less than of an individual—he has been a staunch supporter and a useful worker. He had a special and intimate knowledge of large-scale retailing and he always held the view that enlightened retailers could be encouraged to take an active, perhaps even a decisive, part in the work the Council had been set up to do. This view has since been endorsed by the Council as a whole. He was a member of the Information Committee and he spoke at the first three-day conference for retailers organised by the Council. He was never one of those who underestimated the size of the job which the Council was about to tackle, so that he was not depressed by difficulties nor unduly elated by successes. He will be remembered with gratitude by the staff as one who was always friendly and encouraging, full of sound commonsense and with a deep knowledge of distribution problems, both in this country and in America.

Lord Woolton, his chief at Lewis's, brought him to the Ministry of Food during the war and we feel we cannot do better than quote the notice which Lord Woolton contributed to *The Times* on 9 March:

"The sudden death of Mr Philip Whalley will leave a wide gap in the considerable circle of people who enjoyed his friendship. He had the gift of easy companionship, a buoyant and refreshing confidence, and considerable intellectual capacity. He was at school at Aldenham: a Scholar of Caius at Cambridge and a Tancred Scholar of Lincoln's Inn. After practising on the Northern Circuit he decided to seek his fortune in business and came to me as a private secretary. I remember one of the present Judges of the Court of Appeal shaking his head at me and saying: 'If you'd have left Whalley at the Bar he would have made a mark' . . .

"In business he joined a group of young men who were working their way on the hard road of experience to positions of importance in the business of large-scale retailing, and he achieved much success. But when war came he was restless for national service and wanted to join the Air Force. He was too old for combat service and was persuaded instead to join the voluntary staff of the Ministry of Food. Here his ability rapidly found an outlet satisfactory to himself and of considerable value to the nation. He came to be Controller of the Meat Division at a period of much difficulty, and so impressed his Civil Service colleagues that his sphere of control was considerably increased until at the end of the war he was Deputy Secretary to the Ministry and widely esteemed both in Government and trade circles. He was awarded the CBE in 1945, and after he returned to business he maintained an active association with the Board of Trade on account of his interest in the application of good design to British industrial production."



Winning design for a combination stove by B. Anthony Mann, from the latest Industrial Art Bursaries Competition. Photographed (from a model) by Richard Sharpe Studios

Design by students: 1

Winning and commended designs from the 1949 Industrial Art Bursaries Competition were shown in London recently, and the Bursaries Board has issued its report (Royal Society of Arts, 6*d*). Members noted an increase in the numbers of candidates and schools participating—"although these numbers are sometimes still very small"; they are concerned at candidates' lack of understanding of the design-requirements of jacquard-woven fabrics; they hope that the presentation of entries, which is improving, will improve still further; and they "very much desire to see a closer relationship between art and technical schools and the industries in their district."

As an experiment—which the Board considers is serving a useful purpose—the Domestic Solid-Fuel-Burning Appliances Section of the competition is now open to young draughtsmen and clerks engaged in the industry, as well as art students. For three years running, this section has been won by students of the LCC Central School of Arts and Crafts; and in the last two years (since it was opened to industry) entries by draughtsmen of the Eagle Range and Grate Co Ltd, Birmingham, have been highly commended. We illustrate, in model form, this year's prizewinning design: it is for a combination stove to be used in a kitchen-living-room, comprising open fire, cooker, water heater and warm closet. Its 21-year-old student designer is B. A. Mann.

Design by students: 2

Another recent stimulus to student endeavour was the window display competition, arranged by the Regent Street Association through the Council of Industrial Design. Thirty-nine shops in this famous shopping street placed window space, for a week, at the disposal of students in London and Home Counties art schools—with results that gained wide Press publicity and public appreciation. As the *Manchester Guardian's* London correspondent wrote: "not only the students have shown enthusiasm; the best windows had far bigger crowds around them than one normally sees, and perhaps the public's critical standards have been raised."

Not only in London but in the provinces, there is a great interest among students in the work of the Council of Industrial Design: a good omen for the future of design in Britain.

"Designers in Britain"

The third volume of *Designers in Britain*, the SIA's picture-book of British industrial and commercial design, is due to appear in time for the 1951 Festival, and 25 April 1950 is the

continued overleaf

NOTEBOOK *continued*

last date for the submission of material. Manufacturers or designers who consider that their industries were not adequately represented in *Designers in Britain 2* now have an opportunity to remedy this state of affairs in the Festival-year volume (to be published for the SIA by Allan Wingate). Full details can be obtained from the Society of Industrial Artists, 7 Woburn Square, London, WC1.

The reputation of British goods

From an address by John Gloag to the Rotary Club of London:

> . . . It is upon good design that the international reputation of British goods must increasingly depend. Good workmanship and excellent quality in materials are not enough. In this country, we have some of the finest industrial designers in the world. They should all be working overtime for British industry. . . . As a passionate believer in free enterprise, I am no friend of government-sponsored concerns; but in the Council of Industrial Design I recognise and applaud an organisation manned by practical, hard-working people, whose feet are on the ground, whose eyes are on the facts, and whose work should be used.

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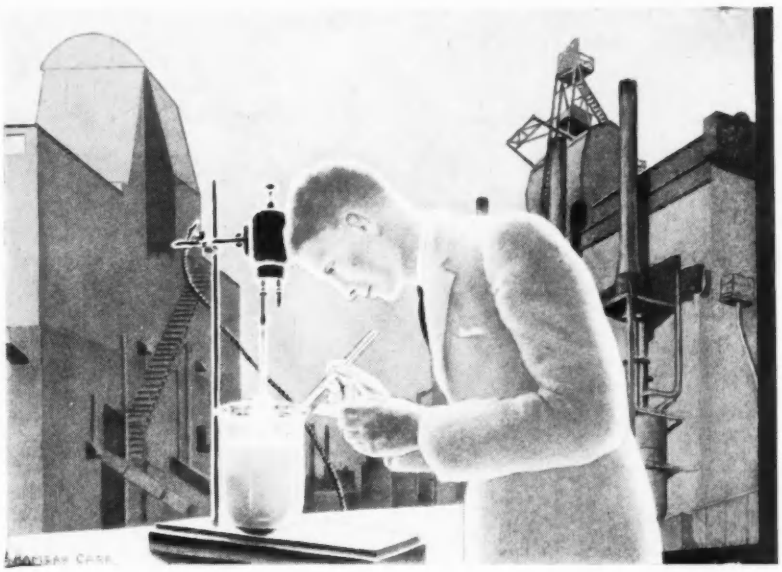
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RESEARCH AND PRODUCTION

The chemical industry is the keystone of national production. Without a vigorous and efficiently organised chemical industry production would suffer almost at once, alike in factory and in field. Without constant supplies of chemicals the staple industries of Great Britain could not continue. Coal, iron and steel, for example, generally accepted as the basic materials of Industry, cannot themselves be produced without chemicals. Nor can basic foodstuffs like wheat and oats and even milk. There is scarcely a trade or manufactured article which does not depend upon alkali or acids. The products of organic chemistry, based on coal, expand in volume and variety as new uses are found for them. These uses range from dyestuffs on the one hand to drugs, antiseptics and anæsthetics on the other. Chemicals are necessities. But it is not only in the supply of essential raw materials that the chemical industry is fundamental. Chemical research is equally fundamental in the sense that research, relentless but imaginative, vitalises all production both in Industry and in Agriculture. The responsibility of the research chemist is enormous. He must concentrate on the manifold day-to-day problems of this trade or that without ever losing sight of the distant horizon and the boundless possibilities opened up by his own discoveries. He must ensure the Present and make possible a richer Future. In research laboratory and in factory the British chemical industry serves the nation's needs, striving always to achieve greater efficiency, better processes and a constantly increasing flow of new products.

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NOW is the time to offer your products for the 1951 STOCK LIST

THE COUNCIL of Industrial Design has been given responsibility for the selection of all contemporary manufactured articles to be shown at the 1951 Festival of Britain exhibitions. To this end the 1951 Stock List, an illustrated index of potential exhibits, has been opened.

Final choice will not be made exclusively from the list but, in order that no product may be overlooked, we urge manufacturers and designers to send, as soon as possible, photographs of their best work.

The principle of selection will be that of the highest standard of contemporary design, taking into account functional, decorative and engineering qualities. Photographs should be approximately 8in. by 6in. and should not be retouched. Details of new techniques and materials are also welcomed.

Manufacturers are not asked to strain after novelty nor to produce exhibition stunts, but simply to help forward the work of selection by themselves choosing their best current products.

Inquiries to: Chief Industrial Officer
The Council of Industrial Design
Tilbury House, Petty France, London, SW 1



A booklet, "Notes for Industry on the 1951 Exhibitions" is available free from the above address. It includes a list of industries to be represented, a plan of the South Bank site, and details of the method of selection.

DESIGN is published for the Council of Industrial Design, Tilbury House, Petty France, London SW1 (Scottish Committee : 95 Bothwell Street, Glasgow C2) by His Majesty's Stationery Office, and printed in Great Britain by Benham and Company Limited, Colchester.

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